



# **OPTi Mouse**

## **User Manual**

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## Contents of the OPTi package

- The OPTi Mouse
- USB 2.0 cable
- Charger with mains lead
- OPTi Vista CDROM with application
- This user manual
- Installation guide
- Quick reference guide

## Installation



The OPTi requires that you first carry out the software installation before plugging the unit into your computer. Please refer to the installation guide before continuing.

## OPTi Mouse hardware

Once the software and drivers are installed you can connect the hardware to the computer. The hardware consists of:

- The control box
- The USB lead
- The mouse camera
- Battery charger (required only when charging the internal battery)

## **Setup**

Plug the camera into port A on the front.

Plug the USB lead into the control box and the other end into the computer.

Run the OPTi software and the image from the mouse camera should appear.



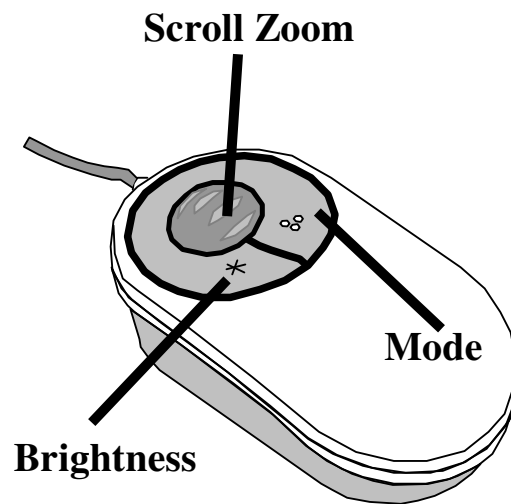
The mouse **MUST** be plugged into port A; it will not operate in port B and will return a message "Camera not detected".



Do not plug a computer network cable into the camera ports on the OPTi! These connectors are for Ash camera products only and could result in permanent damage to either the OPTi or other equipment on the network, if connected.

## ***Using OPTi Mouse***

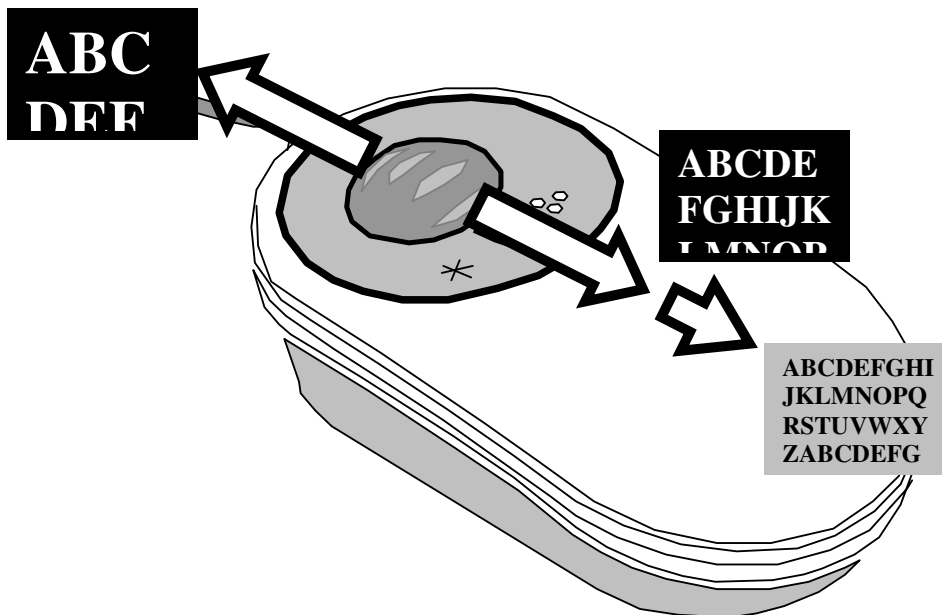
OPTi Mouse is designed to slide across the text you wish to read. The camera has two buttons, brightness and mode that can be programmed to perform certain useful tasks (see Button Functions on page 27)



## ***Adjusting the magnification***

Rotate the scroll-zoom wheel forwards and backwards to select the level of magnification you are comfortable with. Sliding the scroll wheel forwards increases the magnification, while rotating backwards will decrease the magnification. Rotate the scroll wheel fully backwards and

the mechanism will click into an overview mode, which moves the focusing area beyond the base of the mouse. This mode is needed when using the handwriting stand.



The overview mode allows you to orientate your position on the page, read into awkward places or to view objects that are not flat.

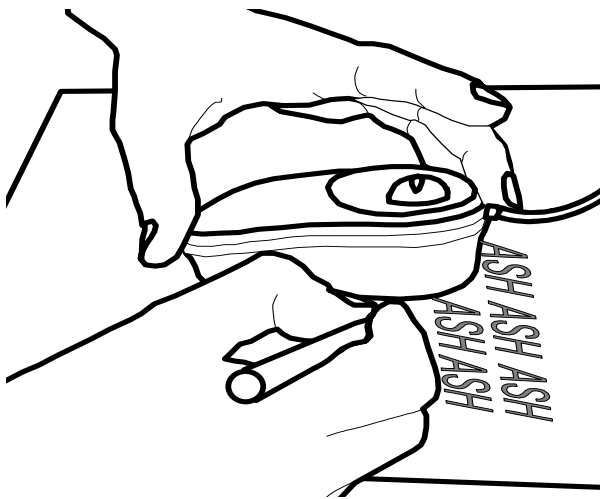
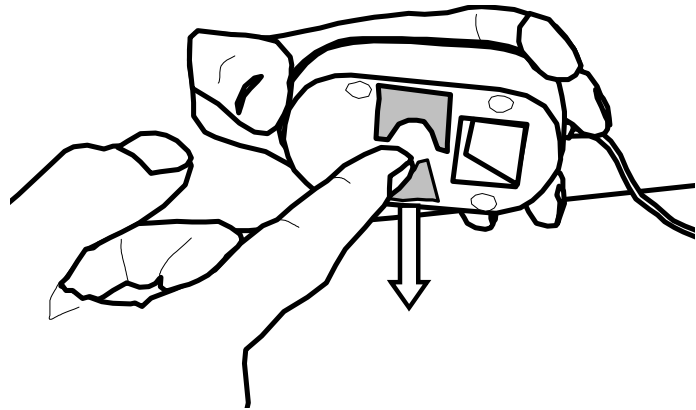
The magnification level cannot be altered in overview mode.



## Writing with your OPTi Mouse

The mouse has handwriting stands that can be pulled out that allow you to write with the aid of the camera.

Flip out one of the stands: use the left-hand-side stand if you are right handed and vice versa.



Rotate the scroll-wheel on the mouse fully backwards i.e. into overview mode.

When using the mouse for writing, it is best to use the full color mode.

## ***Charging OPTi Mouse***

OPTi Mouse contains a rechargeable battery that must be charged periodically if you want to use it on the move. Simply plug the charger into the rear of the unit and a wall socket and leave it to charge. The battery will be fully charged in 4 hours and should last approximately 10 hours of usage. The unit can be used while it is charging.

## **OPTi software**

The OPTi software consists of the video window and the toolbar. The video window displays the real time video image captured by the unit itself. The video window is movable and resizable both horizontally and vertically.

The toolbar window displays the main controls for the software. This allows you quick access to the video control features and to the main menu.

As you move the text or image under the OPTi's camera, the image will be displayed

on the video window. There are many features on the OPTi software that allow you to optimise the display for your particular requirements.



Shortcut keys in this manual are described in the form "**Ctrl+X**". This means that you press and hold the control key and press the letter ("X"). The shortcut keys only have effect when OPTi is the active program; they are not trapped by OPTi and may have another function entirely in other programs.

One exception to this is the Scroll-Lock button, this button is trapped by OPTi. Pressing this button will make OPTi the active application, and so OPTi will appear on top of any other program that is running.

## The toolbar explained

The following section explains the functions of the buttons on the OPTi toolbar. The complete toolbar is illustrated below.



Each of the buttons functions is explained in this section along with their equivalent keyboard shortcuts. On OPTi Mouse it is also possible to program the control panel buttons to perform some of these functions. This allows you three ways to control OPTi, the PC mouse, the PC keyboard and the control panel on the front of the unit itself.

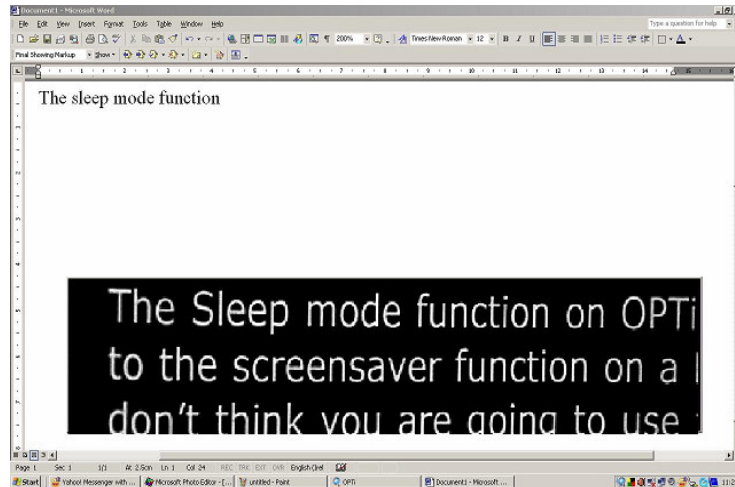
### ***Keep on Top***

Toolbar: 

Keyboard: **Ctrl+T**

"Keep on top" forces the OPTi video window on top of any other program window. For example, in the image below the user is typing in MS Word but the OPTi video window is sitting 'on top' of MS Word

and is visible even though Word is the active application.



### ***Sleep mode On/Off***

Toolbar: 

Keyboard: **Ctrl + S**

The Sleep mode function on OPTi is similar to the screensaver function on a PC. If you don't think you are going to use your OPTi for a while but want to leave the program running, you can save battery power by simply putting OPTi into Sleep mode. This causes the video window to disappear and turns off OPTi's internal circuitry.

## ***Full colour/Reading mode***

Toolbar:  or 

Keyboard: **Ctrl + G**

This button provides an alternative way to switch between full colour and reading mode.

## ***Positive / Negative mode***

Toolbar: 

Keyboard: **Ctrl + R**

This button toggles between positive and negative reading modes. If you are in full colour mode pressing this will place you in the last reading mode used.

## ***Full Screen***

Toolbar: 

Keyboard: **Ctrl+F**

When OPTi is in full screen mode the video window takes up the entire screen and only the toolbar window will be visible over the video window.

## ***Views and the Views Manager***

Toolbar:  to cycle

Keyboard: **Ctrl + Shift + 0...9** to save

**Ctrl + 0...9** to recall

**Ctrl + V** to cycle the views

When you have set up the display the way you want it, you can store the settings for later recall. In fact you can store ten arrangements or “views” which can be recalled as you desire.

When you start the program for the first time all ten views will be at the default setting.

If you make a change to a view you can store it as one of the ten views (View 0 to View 9) as follows:

**Ctrl + Shift + 0** to save as view 0

**Ctrl + Shift + 1** to save as view 1

and so on up to


**Ctrl + Shift + 9** to save as view 9

You will be prompted to confirm that you wish to save the current layout.

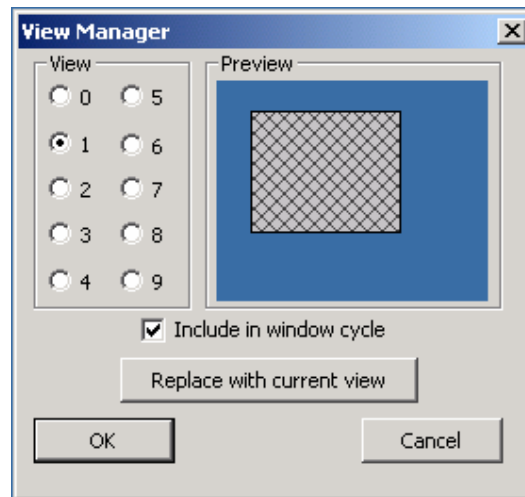


Note that you cannot store a setting at full screen. You should instead use Page Up to enlarge the window to the maximum size and then save this instead.


To recall the stored views, press **Ctrl + 0** to **Ctrl + 9**. You will be prompted to save any changes you made to the current view when you change to another view.

You can use the Views Manager to look at the views you have stored. You can access this from the menu by pressing the Menu button  (see page 22), then "Views" and then "Views Manager". Choosing view 0 to 9 will display a preview of the view as it would appear on the screen in the colours stored for that view. You can choose OK to select a view. The image below shows a screen grab of the Views Manager.






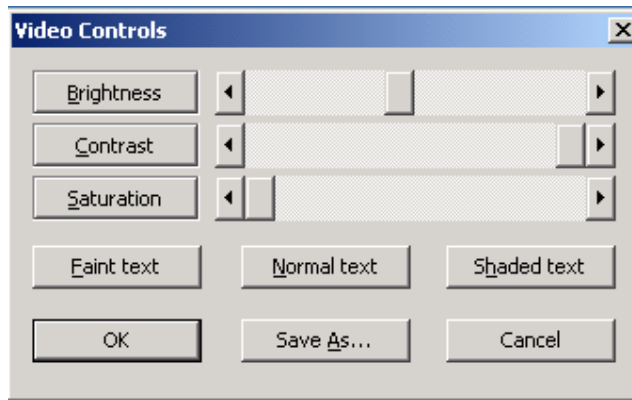
The "Replace with current view" button will store the current screen layout into the selected view. In the case above, view 1 would be replaced with the current view.

The "Include in window cycle" checkbox can be set for each of the ten views. If this box is checked for a particular view then that view will be displayed in rotation as you cycle through the views with the  button on the toolbar or by pressing **Ctrl + V** on the keyboard, or alternatively with one of the front panel buttons programmed to cycle views. (Programming the front panel buttons is covered later in this manual.)

## Video controls

Toolbar: 

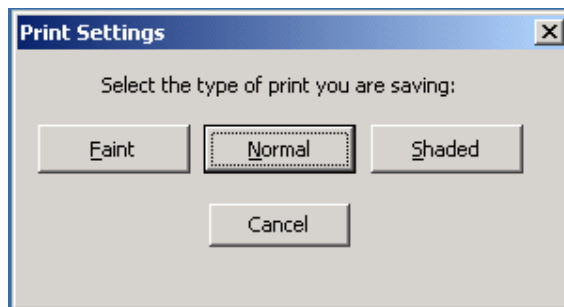
The video controls allow you to control the brightness and contrast and saturation of the OPTi image. Press  on the toolbar or from the menu choose "Options", "Video controls" (Keyboard: **Ctrl + M, O, V**). The Video controls dialog box is shown below.



The slider controls can be adjusted as you desire. You can use the mouse to move them or you can use the keyboard. For example to change the brightness of the image, press "B" and then use the arrow keys on your keyboard to move the slider left and right. Once you are happy with the settings press OK or press "Enter". The "Faint text", "Normal text" and "Shaded text" buttons allow you to store settings

that are best suited for viewing text in those conditions.

For example if you are reading very faint text you may want to turn down the contrast. When you are happy with the image press the "Save As" button (Keyboard: A) you will see the following dialog box:



If you then press the "Faint" button (Keyboard: F) your video settings will be stored, and the next time you are viewing faint text you can recall them by pressing the "Faint text" button on the video settings dialog.


The video settings for Photo, Positive and Negative are independent of each other. Also these settings are saved with each view.

## ***Capture***

Toolbar: 

Keyboard: **Ctrl + C**


The capture button allows you to take a photograph of the image currently being displayed on OPTi's video window. The image is saved as a .bmp file into a folder on your computer hard drive. The folder is created automatically when you install the software. It is located in the "My Pictures" folder on your computer and is called "OPTi Images". It is advisable to create a shortcut to this folder on your desktop.

To operate the snapshot you can press the  button or from the keyboard press **Ctrl+C**.



The OPTi Images folder is created when the software is installed. It is very important that you do not move or rename this folder. If you do then the snapshot function will not work.

Images are saved as "OPTiImg001.bmp". Every time you take an image the file name increments. The image shows how the folder will look after several snapshots have been taken.

	OPTiImg94.bmp	901 KB	Bitmap Image	05/04/2006 15:24
	OPTiImg95.bmp	901 KB	Bitmap Image	05/04/2006 15:40
	OPTiImg96.bmp	901 KB	Bitmap Image	05/04/2006 15:40
	OPTiImg97.bmp	901 KB	Bitmap Image	05/04/2006 16:31
	OPTiImg98.bmp	901 KB	Bitmap Image	05/04/2006 16:31
	OPTiImg99.bmp	901 KB	Bitmap Image	05/04/2006 16:32
	OPTiImg100.bmp	901 KB	Bitmap Image	05/04/2006 16:33

As you can see the file name increments by 1 each time a picture is taken.

### ***Hide toolbar***

Toolbar: 

The hide toolbar button allows you to remove the toolbar from the display. This is useful if you want to view in full screen with nothing else visible. You can bring the toolbar back by clicking on the OPTi icon in the system tray as show in the screen grab below.



Alternatively, if you put the mouse cursor on the video display and right click the main menu will appear. From this choose "Options", "Preferences" and then in the Preferences dialog box you can select where you wish the toolbar to be placed. (Keyboard: Ctrl+M,O,P)

(OPTi's preferences menu will be explained in the next section)

### ***Exit Program***

Toolbar: 


Keyboard: **Alt + F4**

This button can be used to exit the program. Alternatively you can use the menu and choose "File" "Exit" by pressing **Alt+F4**.

## **Main menu**

Toolbar: 

Keyboard: **Ctrl + M**

All of OPTi Mouse's features can be accessed from its popup menu. To display the menu, press the  button on the toolbar or right clicking on the video window. You can also access the main menu from the keyboard by pressing **Ctrl + M**.

The main menu allows you to access all of the program features and appears as follows:



Each of the submenus allows you to access different features in the software. Most of these functions are accessible directly from the toolbar, but some are not. The menu functions are explained next.

## File

The File submenu allows you to put OPTi into **Sleep** mode, enable or disable the **Keep on top** feature or to **Exit** the program.

## Mode

There are three image modes: **full colour**, **positive** and **negative**. The positive and negative modes are generally used for reading while the colour mode is used for photographs and difficult-to-read texts. The foreground and background colours can be changed in the reading modes, see the section on page 29 for details.

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*Moving the disp*  
The display windo  
location on the sci  
it or by using **Shif**

Full-colour, Negative and Positive texts

## View

The View submenu allows you to select the view you wish to use. This is an alternative to pressing Ctrl+0, Ctrl+1 and so on. You can also access the Views Manager dialog



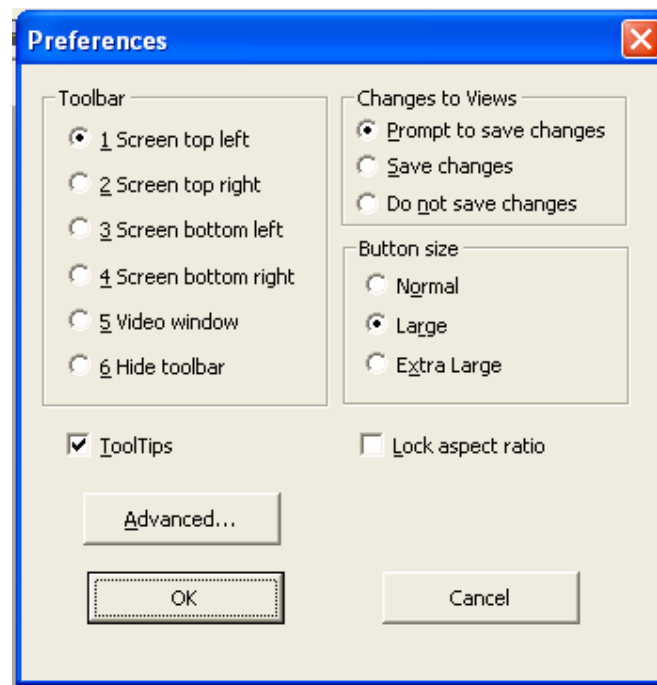
box from here. Refer to the section on the views manager on page 15

## **Options**

The Options submenu allows you to access the Video Controls, Preferences Button functions, Colours and Markers. Video Controls have been described on page 17 and the subsequent sections will detail the operation of the Preferences, Button functions, Colours and Markers.

### **Options ... Preferences**

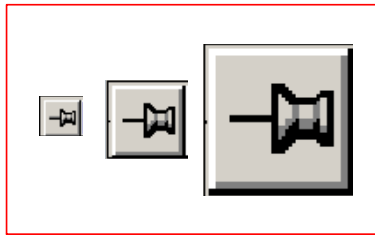
From the menu choose "Options", "Preferences" (Keyboard: **Ctrl + M,O,P**)  
The preferences menu appears as follows;



- You can use the “Toolbar” controls to select where the toolbar is displayed. Note that the “Screen top left” and “Screen top right” deliberately leave room for the Windows control buttons. Choosing “Video window” will attach the toolbar to the top left of the display window. You can also choose to hide the toolbar.
- If you do not want to be prompted to save changes to the current view you can choose to automatically accept or

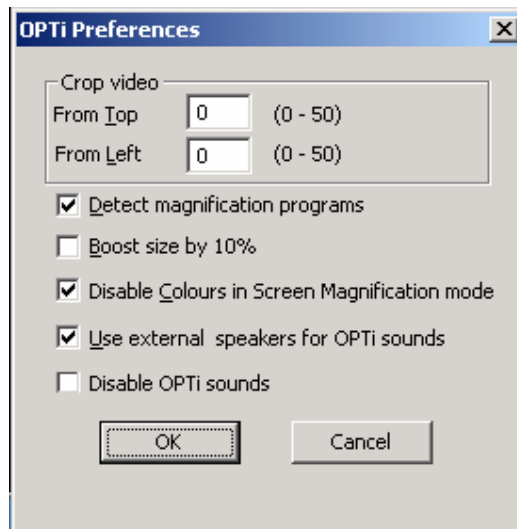
reject all changes with the “Changes to Views” option you select.

- OPTi can display the toolbar in three different sizes, these are normal, large and extra large, the image below shows a comparison of how these appear from smallest to largest



- ToolTips may be turned off by unchecking the ToolTips checkbox.
- Un-checking the “Lock Aspect Ratio” will allow the video to be stretched to fill the display window. If the display window is set to be taller than wide the video will appear in tall, skinny characters. If the display is much wider than tall the video will appear fatter than normal. This setting may produce an image that is easier to read for certain eye conditions.

The “Advanced” button opens up another window with the following options;

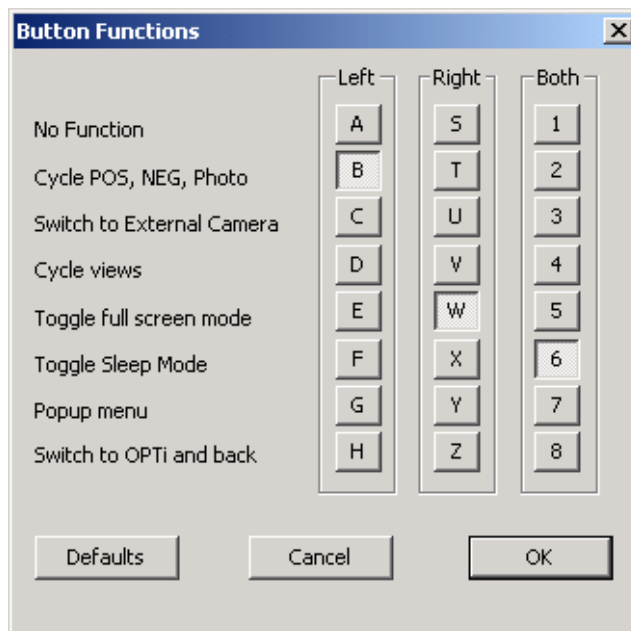


This menu allows you to crop the video image, to boost the size of the displayed text by 10% and to automatically detect screen magnification programs such as Dolphin Supernova and Lunar. In normal use these settings are not needed when you are using OPTi.

## Options ... Button Functions

OPTi Mouse has two buttons. These buttons can be programmed to perform one of a number of functions. From the menu choose “Options”, “Button Functions” (Keyboard: **Ctrl+ M, O, B**). This window appears as follows:

## OPTi Mouse User Manual



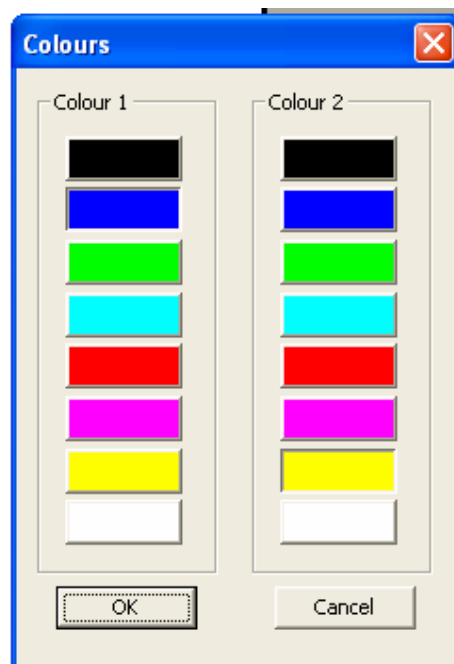
Use the mouse to choose the function you desire for the left button, the right button, or for both buttons pressed together. You can also use the keyboard to program the buttons, for example, pressing "B" on the keyboard programs the "Left" button to cycle between positive, negative and color. By pressing "W" on the keyboard the "Right" button is programmed to turn on or off full screen mode when you press it. By pressing "6" on the keyboard the "both" button is programmed to toggle sleep mode when you press it

The functions you can program the buttons to do are self-explanatory with the exception of "Switch to OPTi and back".

This is equivalent to pressing scroll lock on the keyboard.

## Options ... Colours

The colours used to display the text and paper can be altered. From the menu choose "Options" and "Colours" (Keyboard: **Ctrl+ M, O ,V**). A dialog box appears as follows:



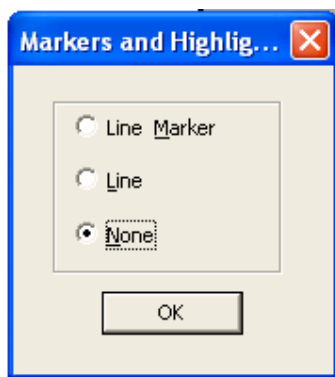
From the dialog box above you can choose the foreground and background colour that you require. You cannot select the same foreground and background colour. If you are using the keyboard, you can switch between the colours by using the Tab key.

Alternatively you can select the required foreground or background colour from the keyboard. Use **Alt + ←, →, ↓, ↑** to cycle between the available colours.

You must be in Positive or Negative mode for this menu to work. You cannot change the foreground and background colours when you have the unit in full colour mode.

## Options ... Markers

OPTi also has an adjustable reading line and line marker that you can turn on and off as required. From the menu choose "Options" , "Markers" (Keyboard: **Ctrl + H**) The dialog box shown below will then appear.



The position of the line or the line marker is adjustable from the keyboard using **Ctrl+ PgUp** or **Ctrl+ PgDn**. The screen-

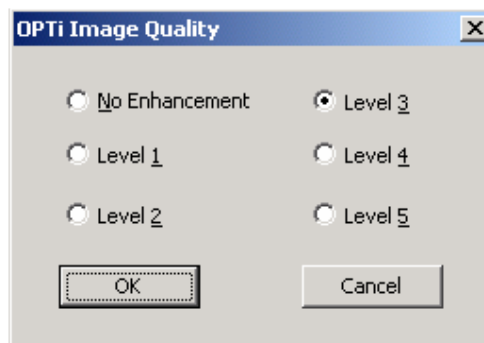
grabs below show how these features appear when viewing text.

highly transportable configuration weighing just over 1kg.  
A wide and varied range of tasks can be performed such as needlework, model

highly transportable configuration weighing just over 1kg.  
A wide and varied range of tasks can be performed such as needlework, model making and drawing

## ***Image Quality***

The quality of the video displayed on the OPTi screen can be controlled using the Image Quality window. You can access this by pressing **Shift+N** on the keyboard. The window appears as follows on the desktop:



**Image quality control window**

There are six levels of quality enhancement available to the user, starting at No Enhancement and progressing to Level 5 enhancement. OPTi



defaults to Level 3 enhancement. This gives excellent image quality with very little impact on PC resources.

To change the image enhancement setting simply select the level you desire and click on OK. The OPTi image will disappear from the desktop for about 4 seconds before reappearing. When video reappears OPTi will be operating at the new image setting. The image enhancement control affects how the OPTi image appears when the camera or the object of interest is moving.

## **Help**

The help submenu allows you to access the online help, (Keyboard: **F1**), reset the programme to factory defaults and view the About window.

# OPTi and Screen Magnification software

OPTi Vista Versions 1.2 and above are compatible with the following screen magnification software:

<b>BRAND</b>	<b>PRODUCT</b>
Dolphin Oceanic	Supernova V8.01 and above
AI Squared	ZoomText V9.1 and above

OPTi works differently when it is running in screen magnification mode. This section describes how to use OPTi with screen magnification software.

When OPTi starts it checks to see if any supported screen magnification programs are currently running, if they are the software will change from normal mode to compatible mode during start up.

Once OPTi detects the screen magnification software it adjusts its settings to those required for operation with screen magnification on.

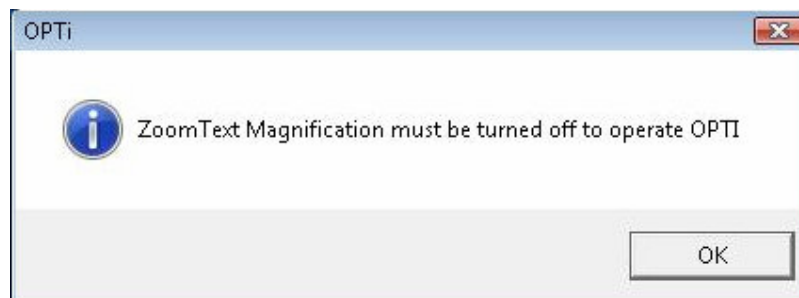
## ***AI Squared: ZoomText***

If ZoomText is active on the User's computer then OPTi will start-up with the toolbar visible as shown:



The toolbar only has the stop/exit application button available.

An information box appears indicating to the user that magnification needs to be turned off for OPTi to become available:



The OPTi will only operate when ZoomText magnification is turned off. OPTi can start up while ZoomText is running but unless magnification is turned off the OPTi video window and fully functional toolbar will not be available. When magnification is turned

off the OPTi video window appears and full toolbar functionality is made available.

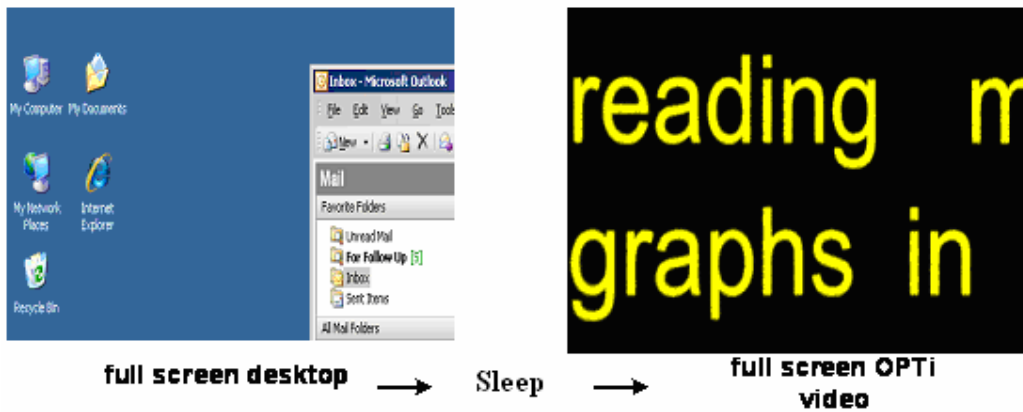
### ***Dolphin: Supernova***

If Supernova is active on the User's computer then OPTi will start-up in Sleep Mode with the toolbar visible as shown:



The toolbar will appear with limited functionality available. The only available functions are sleep and exit.

When in this mode you either have the screen filled with OPTi video or with the desktop. To swap between the OPTi video window and the desktop you simply press the Sleep toolbar button or hotkey. The image on the next page illustrates how this will appear.



The toolbar is hidden in fullscreen mode although the user can use the hotkey functions or mouse buttons to operate the OPTi.



To swap between the OPTi video and the desktop you simply press the **Sleep** button/hotkey (Page 12)

## ***OPTi Sounds***

This version of OPTi software is able to make sounds to indicate when it is the active application. The purpose behind this is to give an audible indication when you press the **Scroll-Lock** of whether you are making OPTi the active application or not. There are two different types of sound available depending on the state of **“Use external speakers for OPTi sounds”**

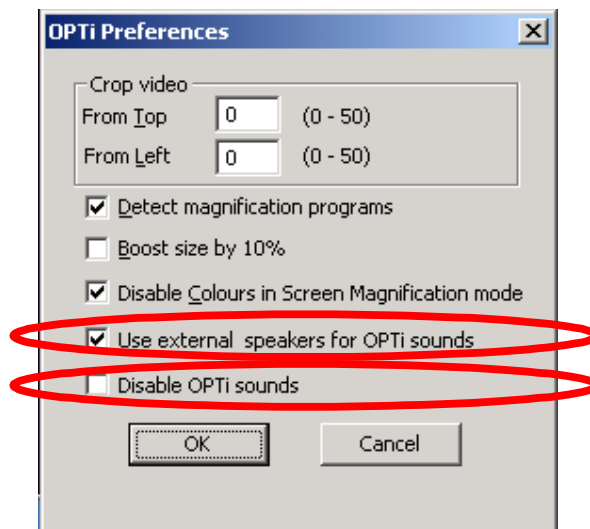
checkbox in the Preferences → Advanced menu.

If this box is ticked, then OPTi will use any external speakers you have connected to emit a double note when you press Scroll-Lock and make it the active application, and a single note when you press Scroll-Lock and stop OPTi from being the active application. This setting is useful for a desktop PC with no internal speaker to make sounds.

If this box is not ticked OPTi will use the internal speaker on your computer. In this case OPTi will emit a “Buh – Dee” note when OPTi is being made the active application and a “Dee – Buh” note when OPTi is no longer the active application. This setting is useful for a portable laptop computer with no external speakers hooked in.

Looking at the Advanced menu in the image below, the two settings related to OPTi sounds are circled in red.

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### OPTi Preferences → Advanced menu

The second checkbox simply stop's OPTi from making any sounds at all regardless of what state the **"Use external speakers for OPTi sounds"** checkbox is in.

## Taking Care of your OPTi Mouse

Do not touch the lens. Dirt on the lens will appear as a blurred or dim image or as fuzzy spots on the screen. If you believe the lens is dirty, it can be cleaned with a **soft**, dry cloth applying minimal pressure. As the lens is polished and coated, do **not**

use a wet or coarse cloth, detergents, abrasive substances or solvents to clean it.

## Warranty

Ash Technologies warrants the equipment, when purchased new, to be free from defects in material and workmanship and will repair or replace at Ash Technologies' discretion, any equipment which exhibits such defects, provided that the equipment has been operated under the proper conditions of installation and has not been tampered with by any persons not authorized by Ash Technologies or its agents and that it is solely serviced by Ash Technologies or its agents. This warranty shall be voided in the event of damage or abuse to the unit caused, in the opinion of Ash Technologies or its agents, by general wear and tear, abuse, neglect, failure to observe stated precautions or by dropping the unit.

Batteries are warranted for failure within a period of one year. Non-electrical accessories are specifically excluded from warranty.

In no event shall Ash Technologies, or its agents, be liable for special, indirect, incidental or consequential damages; the original user's remedies being limited to repair or replacement.

Ash Technologies makes no other or further warranty, express or implied, including and warranty of fitness for a specific purpose or warranty of merchantability.

**This warranty is valid for a period of TWO YEARS effective from the date of delivery to the customer.**

Depending on the country of sale, the warranty conditions may differ. Contact your distributor for details.

**For warranty claims or service during or after warranty period please contact your distributor.**



## **DECLARATION OF CONFORMITY**

We, **Ash Technologies Ltd.**, declare under our sole responsibility that this product, **OPTi Mouse**, of the brand **Ash Technologies** to which this declaration relates, is in conformity with the following standards or other normative documents:

EN 60601-1 Medical Electrical Equipment - Safety

EN 60601-1-2:2001 Medical Electrical Equipment – Electromagnetic  
Compatibility



Following the provisions of EMC directive 89/336/EEC and Low Voltage directive 73/23/EEC and the provisions of 93/42/EEC Medical electrical equipment directive.

Alan Johnston  
Engineering Director  
Ash Technologies Ltd, Naas, Ireland.  
24<sup>th</sup> April 2006



## **OPTi Mouse User Manual** **Revision 1.0 English**



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